



Business Prospects Under Coastal Zone Management

WASHINGTON, D.C.
March 1976

HT
392
.B87
1976

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of Coastal Zone Management



Business Prospects Under Coastal Zone Management

A report prepared by:
REAL ESTATE RESEARCH CORPORATION
Chicago, Illinois

WASHINGTON, D.C.
March 1976

This report was prepared under contract to
the U.S. Department of Commerce

U.S. DEPARTMENT OF COMMERCE

Elliot L. Richardson, Secretary

National Oceanic and Atmospheric Administration

Robert M. White, Administrator

Office of Coastal Zone Management

Robert W. Knecht, Director

41T392 .B87 1976

I. NATURE OF STUDY

The Office of Coastal Zone Management of the U.S. Department of Commerce has contracted with Real Estate Research Corporation for the conduct of a brief, preliminary analysis of the potential economic impacts of coastal zone management on development activity and business prospects -- with reference to the California Coastal Plan as an example. The study focuses on many of the concerns of greatest interest to business and real estate interests -- the effects of coastal zone management on public expenditures (and therefore taxes), land values, investment opportunities and business profitability. It also considers how these impacts affect the ultimate consumer -- the citizen who seeks a high quality of life in the coastal environment.

All 30 coastal states and 3 U.S. territories have coastal zone planning programs underway at this time. While the primary purpose of these plans is rational management of coastal resources, it is recognized that the implementation of the plans will have economic consequences. Economic impact studies to date regarding coastal zone management have either been mainly theoretical or they have focused on costs without sufficient attention to potential economic benefits.

Concurrent with this study by RERC is a complementary study by the Urban Land Institute. ULI's study is a combination of conceptual exposition and literature search. This study by RERC also develops conceptual bases for identifying and quantifying economic impacts of coastal zone management. Moreover, RERC has identified specific impacts for selected major facets of the California Coastal Plan.

The major focus of this study has been on three significant economic impacts -- (1) public investment in facilities and services (with and without the Plan), (2) the Plan's effect on land values, and (3) economic development -- e.g., its impacts on employment, business investment and profitability, and construction activity.

These impacts were selected because they account for the preponderance of potential change (both positive and negative) in business prospects that might result from implementation of the policies and programs outlined in the California plan. Quantifiable costs and benefits will reach the ultimate consumer in the tax burden he or she bears, in the value of land and buildings for homes or businesses, in income gained or lost from employment or investment in the coastal zone and in prices paid for consumer goods and services produced in the coastal zone -- marine and agricultural produce, forest products, other manufactured goods and retail or

Business Prospects Under Coastal Zone Management

office services. However, consumers will also reap the more "intangible" benefits of a more attractive and healthy environment, less crowding, and increased access to recreational opportunities. Such benefits are noted where appropriate in this report. However, its major focus remains on the economic impacts of plan implementation on property values, taxation, development activity, and business prospects in general. These impacts are primarily short term in nature -- their effects will be felt immediately after the plan's policies are implemented and for some years thereafter.

In completing this study, RERC has relied heavily on: (1) RERC research on economic impacts, especially The Costs of Sprawl; (2) selected interviews with various knowledgeable people regarding coastal planning and development; (3) review of readily available economic studies on coastal zone management; (4) study of the California Coastal Plan; and (5) participation in a seminar entitled "An Exploration of the Economic Benefits of Coastal Zone Management" sponsored by the Office of Coastal Zone Management and the Urban Land Institute (January 26, 1976). RERC appreciates the excellent cooperation of everyone contacted in the course of this brief study. While valuable data and insights were shared, this report is the responsibility of RERC.

II. SUMMARY OF FINDINGS AND CONCLUSIONS

The preparation and adoption of coastal zone plans have only limited economic effects; the true impact of such plans can only be estimated when specific implementation programs -- capital improvements, regulations, incentives, public acquisition, persuasion -- are detailed. In California, Coastal Zone Planning is undertaken by many jurisdictions each with long standing experience in zoning, subdivision regulation and land use planning. Implementation of plan objectives would be a local responsibility, and would largely rely on existing tools. These activities are recognized by the courts and most citizens as legal, legitimate exercises of the police and other powers to achieve public benefit. Thus, many of the policies and programs contained in The California Coastal Plan are likely to be implemented with or without the Plan's adoption. In evaluating its economic impact, a key question is to what extent does the Coastal Plan result in changing conditions or business prospects that would be different from what would occur anyway under local plans, regulations, and programs.

Business Prospects Under Coastal Zone Management

Benefits and Beneficiaries

Benefits of coastal zone management will accrue to everyone in the zone as well as most everyone elsewhere in the state and country. These benefits will be of various kinds and they will occur in different ways to different degrees. There will similarly be costs to be borne, but this study is focused on benefits.

The following major categories of beneficiaries can be identified:

- Owners of property directly affected by implementation devices
- Neighboring property owners
- Competition -- other properties that might be marketable for the same use
- Owners of businesses whose productivity or market attractiveness would be enhanced by plan policies
- Government at all levels
- The general public

Potential types of benefits are numerous. Benefits of coastal zone management are the positive changes which occur in the nature, scale, distribution, and pace of elements such as the following:

- Production (including manufacturing, agriculture, mining, fishing)
- Utility services and costs
- Business sales, costs, and profits
- Employment opportunities
- Population and labor force
- Housing demand and supply
- Construction
- Financing and investment
- Property values and transactions

Business Prospects Under Coastal Zone Management

- Government costs and revenues
- Education and recreation opportunities
- Externalities (non-market factors, e.g., aesthetics)

Potential Benefits of Coastal Zone Management

Planning and managing the coastal zones of the United States essentially consist of the use of foresight in cooperatively determining how to both preserve our precious resources and accommodate the needs of an expanding population and economy. To achieve this balanced purpose entails many trade offs which include some short run positive and negative effects but for the most part are redistributive effects. Long run benefits from enhanced productivity of renewable resources -- fisheries, agriculture, forests -- would also be realized.

Potential economic benefits of the coastal zone plan policies can have the following attributes:

- They can be "one time only" or "recurring"
- They can cause net increases in economic activity or merely shift its benefits among individuals or groups
- Costs may be incurred in their attainment -- e.g., expenditures for shore-line restoration or pollution control
- Secondary "spin-off" effects may be felt -- both positive and negative, depending on the nature of the policies and the economic activities affected

The following list of benefits of coastal zone planning and management is similar to the benefits of most state and local planning activities:

- Reduced cost of new development
- Reduced cost of transportation
- Better preservation of natural environment
- Better preservation of existing buildings

Business Prospects Under Coastal Zone Management

- Less pollution
- Less congestion
- Higher quality development
- Better utilization of sunk investments
- Better fit of supply and demand
- Greater awareness of needs and opportunities
- Less uncertainty regarding future potentials
- Improved possibilities for effective actions based on understanding and consensus regarding goals

Potential economic benefits can appear as increased productivity, higher sales, more jobs, greater demand for facilities and services, increased property values, lower taxes, reduced or stabilized consumer prices, and heightened satisfaction with one's physical environment. Prudent coastal zone planning, therefore, results in a balance between conservation of irreplaceable natural resources and the needs--job creation, housing, recreation, and shopping--of an expanding population/economy. While some coastal zone actions will result in net gains or net losses for the local economy, in most instances the short-term effects of the plan are redistributive. Some lost expectations will undoubtedly be encountered, but gains elsewhere should offset these losses. It is expected that in those cases, if any, where regulations would actually result in a legally-determined taking, the regulations would be declared void or compensation paid. Reduced property taxes could help offset severe losses. Planning stabilizes erratic "swings" in expectations because it results in less uncertainty in future prospects of land investment. While there may be short term lags as the economy adjusts to changes induced by the Plan, long-run benefits are likely to balance or exceed costs. For example, some industrial plants may not be built in the coastal zone, in part because environmental protection regulations may make them financially infeasible. They would yield an inadequate rate of return on equity when compared to alternative opportunities. However, that same development proposal may be equally unattractive outside the coastal zone. Moreover, lower financing costs or improved marketing outlook could result in a decision to ultimately go ahead with a deferred project despite the costs of complying with coastal zone regulation. These same regulations will result in heightened opportunities in coastal dependent economic activities--tourism, recreation, agriculture, fisheries, and forestry.

Business Prospects Under Coastal Zone Management

Public Investment With and Without the Plan

The Plan holds the promise of considerable savings in public capital investment and maintenance costs for roads, utilities, and other public facilities. If adopted, new development would be encouraged to make maximum use of available system capacities within existing communities, or locate adjacent to already built-up areas. Fewer miles of new pipeline and urban roads would be extended into rural areas. In a recent study for three federal agencies prepared by Real Estate Research Corporation, entitled The Costs of Sprawl, more compact development was estimated to save as much as \$1,700 per dwelling unit or more in public infrastructure investment over conventional low density sprawl, as shown in Exhibit 1.

EXHIBIT 1

INFRASTRUCTURE SAVINGS ATTRIBUTABLE TO BETTER PLANNED, MORE COMPACT DEVELOPMENT

<u>Community Development Prototypes Presented in <u>The Costs of Sprawl</u></u>	<u>Net Density</u>	<u>Capital Cost per Unit Publicly Provided Infrastructure (collector and arterial streets, utility lines)</u>
I. Planned Mix (planned new community with single-family homes, townhouses and apartments)	6.9 units/acre (40% single-family detached)	\$ 900
II. Combination Mix (part conventional development and part PUD -- same housing mix as in I)	6.9 units/acre (40% single-family detached)	\$2,789
III. Sprawl Mix (conventionally developed suburbs -- same housing mix)	6.9 units/acre (40% single-family detached)	\$3,796
IV. Low Density Planned (planned new community of single-family homes)	4.3 units/acre (100% single-family detached)	\$ 998
V. Low Density Sprawl (suburban single-family development)	3.3 units/acre (100% single-family detached)	\$4,488
VI. High Density Planned (planned community -- mainly apartments)	13.6 units/acre (10% single-family detached)	\$ 835

Sources: Real Estate Research Corporation The Costs of Sprawl: Case Studies and Further Research, Table 15. Prepared for the Council on Environmental Quality and Department of Housing and Urban Development. Unpublished. Data have been updated to reflect 4th quarter 1975 costs.

Business Prospects Under Coastal Zone Management

For purposes of the analysis presented herein, we assume current California "trend" development to be comparable to the "low density sprawl" prototype used in the Costs of Sprawl. More compact development would be represented by "combination mix," consisting of a mix of conventional and planned unit development. The latter is by no means the "least cost" alternative; however, it is unlikely that future California coastal development will be predominantly in large scale planned new communities where developers would bear all the costs of collector street and utility improvements. Comparing trend development with a possible future more compact development form (Type V versus Type II) results in a savings of about \$2,000 per dwelling unit for the latter type.

To get a sense of how substantial these public cost economies could be, we made some reasonable assumptions regarding the nature of future housing construction in the Coastal Zone, and then applied the above stated cost savings:

- 30% of future coastal zone development would correspond to the "combination mix" described above (\$2,789 per unit), enjoying the combined cost savings of compactness and proper location
- 30% would be in-fill development with minimal public infrastructure additions or improvements needed. Assume 1/3 of the cost per unit for the "planned mix" type (\$300 per unit) for improvements to existing in-place systems
- 30% would be "trend" development (\$4,488 per unit) -- provided as they would have been without the Plan.
- 10% would be demand accommodated through rehabilitation of existing structures already serviced with adequate roads and utilities requiring no additional public outlay.

The total public capital cost for accommodating 10,000 dwelling units under these conservative assumptions would be \$22,731,000, versus \$44,880,000 if all future development were of the "trend" type. The savings amounts to \$22,150,000 or \$2,215 per housing unit.

Moreover, if we assume that the construction of public infrastructure is financed with 25 year general obligation bonds at 7% interest, interest payments alone would equal 1.145263 times the principal amount. Thus, capital cost savings of \$22.2 million result in further savings of \$25.4 million in interest charges. Savings of \$47.5 million (capital outlay plus interest) over 10,000 units equals \$4,750 per unit compared to costs under current building trends. The estimated

Business Prospects Under Coastal Zone Management

cost of \$200 million required to implement the Plan's restoration, regulation and site acquisition/improvement programs would be offset by savings in infrastructure capital outlay plus interest resulting from building 42,000 housing units in the Coastal Zone in accordance with the Plan -- with minimal urban sprawl and maximum use of existing facilities. Densities would not be radically increased. Substantial privately borne on-site circulation and utility system development cost savings could also be realized.

Impact of the Plan on Land Values

The key determinants of land values include:

- Natural site characteristics and environment
- Man-made site characteristics and environment
- Community image
- Demand for particular land uses
- Access
- Utilities
- Public facilities and services
- Taxes
- Land use and development regulations

We estimate that, in general, about 55% of land value is attributable to government action, with the balance resulting from the actions of the property owner, his or her neighbors, and the general public. Governments influence land values through use or design regulations, improving access, providing public facilities and services, preserving favorable "images", and through its tax rates and policies. Exhibit 2 shows the different types of government action that impact property values, and their relative importance in determining the overall net effect of coastal zone regulations on land value. Restricting land use options will lower land values of subject properties, but will also transfer any unsatisfied demand to other competitive sites not subject to use restrictions. Regulations requiring mitigation of

EXHIBIT 2

IMPACT OF GOVERNMENT ACTION ON PROPERTY VALUES

Type of Action	Impact on Values of Subject Property	Impact on Values of Neighboring or Competitive Properties	Net Effect on Property Values	Relative Importance of Specific Actions in Determining Impacts
Restrictions on land use	Value declines	Value rises	Redistributional	Very important
Developer required to make improvements or pay fees	Value declines	Value rises	Slightly negative	Unimportant compared to other public actions
Resource amenities protected or restored by government action	Value rises	Value rises	Slightly positive to very positive	Very important
Shore access by the public maximized and protected	Value declines	Value rises	Slightly negative	Less important than use restrictions or amenity protection
Concentrating development in existing communities	If still undeveloped, value declines; if already im- proved, value rises	Value rises	Positive	Very important
Providing infrastructure, public facilities, and services	Value rises	Values unchanged	Positive	Important
Tax reduction or deferral for regulated, restricted, or encouraged uses of coastal properties	Value rises	Values unchanged	Slightly positive	Less important than use restrictions or amenity protection

Source: Real Estate Research Corporation.

Business Prospects Under Coastal Zone Management

adverse environmental impacts result in higher development costs but also result in more attractive, desirable sites. Improved access and public facility provision generally impact positively on land values; however, access improvements can have negative effects -- noise, air pollution, or reduced privacy.

The California Coastal Plan will be implemented through government action resulting in a loss in development potential (and hence lower profit expectations) for some sites -- presently unserviced rural lands, prime agricultural and wooded acreage, areas with development hazards, and parcels with scenic, historic or ecological significance. Recreation and other water dependent uses will be given priority over urban development along the waterfront. If a market for more intense use exists, the affected parcel will lose value. But in a normal market, the demand for more intense use will be transferred elsewhere; this is encouraged by plan policies fostering more compact development in already built-up communities. These cities and villages contain numerous sites previously "passed over" as development spreads. These parcels, and those at the fringe of existing development, will rise in value. The overall net effect of the California plan on land values will ultimately be positive because of better management, improved amenity protection, and reduced uncertainty.

Economic Development Impacts

The Plan's impact on employment and other business investment will vary for major industry sectors. The construction industry will suffer from reduced opportunities along the shoreline and in infrastructure development. It will gain from public investment in housing rehabilitation, provision of on-site recreation, higher quality design and amenity requirements, and more intense use of in-city parcels. Investment and employment potential in agriculture, fisheries, forestry, tourism, commercial recreation, and mass transit facilities will be enhanced through government incentives and regulatory policies. The long range viability and security of these industries in the coastal area will be protected and encouraged, but the costs of doing business in the Coastal Zone may go up for some industries which must purchase more expensive sites and install costly energy conservation, pollution control and design amenities. This added investment stimulates other businesses, but it might also make certain business development or expansion programs financially infeasible. Some industries may therefore choose not to locate in the Coastal Zone as a result of higher costs, but others will be drawn there because of the attractiveness of the physical setting. Exhibit 3 summarizes various types of economic development impacts likely to occur for different sectors. Although California residents and business consumers may have to bear higher costs as buyers, renters, or purchasers of goods and services -- because of higher land costs (due to reduced

Business Prospects Under Coastal Zone Management

availability of developable sites) and greater production costs (because of regulations requiring greater on-site amenities and environmental protection devices) -- they would benefit from stabilized productivity (and price stability) for wood products, agricultural produce, and seafood, as well as reduced energy consumption.

Consumers would also enjoy heightened recreational opportunities in an attractive, uncongested atmosphere. Scenic, historic, and ecologically significant areas would be preserved for future generations of California residents and visitors.

Overall, the economic benefits of coastal zone management in California will, at a minimum, offset non-compensated losses in land values or business opportunity. The positive effects of a more attractive, secure physical environment, combined with greater efficiencies attained from elimination of urban sprawl, will outweigh these losses overall.

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/ Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Concentrate develop- ment in already built- up areas; regulate expansion of utilities and transportation; set criteria for subdivision of rural land (59, 60, 61)	Housing and urban development; transpor- tation; agriculture; energy development; commercial and indus- trial development	Employment oppor- tunities would be transferred to other locations in the coastal zone	Less activity in presently rural areas will be offset by greater opportunities in already built-up areas	Somewhat reduced op- portunities for firms supplying materials for or designing infra- structure extensions; increased opportunities for others	Preserve present open spaces for recreation use and productive agriculture (thus lowering food prices); lower costs of infra- structure
Establish priority of coastal dependent de- velopment over other uses (62)	Recreation and tourism; housing and urban development; commercial and in- dustrial development; commercial fishing	Depends on labor in- tensity of alternate uses - could be positive or negative	Probably slightly nega- tive, as coastal-depen- dent uses will not require as much con- struction as other uses	Will increase invest- ment, although perhaps not as intense or profit- able as non-coastal dependent uses	Preserve coastal land and water resources for those uses which need them most
Protect and enhance special coastal com- munities (58)	Housing and urban development	Slightly positive	Slightly positive	Positive	Greater security and value of homes
Prohibit or restrict de- velopment in hazardous areas (geologic and flooding) (64, 67, 70)	Housing and urban development; commer- cial and industrial development	Nominal net effect; jobs would be created else- where	Nominal net effect; housing demand would be accommodated elsewhere	Nominal net effect	Minimize risk and insurance costs
Regulate signs to encourage visual quality of the coast (54)	Commerce and industry	Nominal	Nominal	Reduced opportunities in the sign industry, perhaps offset by other forms of advertising	More attractive shop- ping and driving environments
Require sufficient on- site parking (106)	Housing and urban development; com- mercial and industrial development	Nominal	Positive	Increases investment; may reduce profitability	Higher housing costs; benefit of parking con- venience, less road congestion

Note: Numbers in parentheses refer to policies listed in the California Coastal Plan.

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/ Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Relate land use decisions to transportation capacity (101)	Transportation; housing and urban development; commercial and industrial development	Slightly negative	Negative in areas with system congestion	Negative in areas with system congestion	Reduces tax burden of road construction
Develop alternatives to excessive use of coastal roads (103)	Transportation	Nominal	Positive, if decision is made to expand non-coastal roads	Nominal	Relieve congestion; lessen travel time
Provide funds for expansion of coastal zone transit (107)	Transportation	Positive	Nominal	Positive	Higher taxes possible
Establish priority of transit over roads (108)	Transportation; housing and urban development	Nominal	Negative	Unclear - may have difficulty in receiving and shipping goods	Alternative to families without cars; reduced commuting costs and other costs of auto maintenance
Limit expansion of coastal airports (113)	Transportation; commerce and industry	Slightly negative	Negative	May have difficulty in receiving or shipping goods	Protect against noise and hazards
Develop no new general ports; maximize use of existing ports (116, 117)	Transportation; commerce and industry	Nominal net effect	Negative	Nominal	Protect water resources for other uses
Implement use of solar heating/cooling systems (75)	Housing and urban development; energy development	Positive	Positive	Positive, assuming improved technology	Higher capital cost of housing; lower operating costs; conservation of fuels
Restructure utility rates to encourage conservation (71)	Energy development	Nominal	Nominal	Increased investment in means of conserving fuel use	Lower utility bills; less energy use

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Remove outmoded plants from beach area (80)	Energy development	Negative until replaced with new facility	Positive - will mean new construction else- where	Increased investment in equipment for re- placement facilities	Return beach to rec- reational use; greater production efficiency at lower cost
Institute energy con- servation measures for new development (72)	Housing and urban development; commer- cial and industrial development	Nominal	Slightly positive	Positive	Higher cost of housing or commercial/indus- trial buildings, lower operating costs
Establish siting and design criteria for power plants, petroleum development, refineries, tanker terminals, LNG facilities, and other industrial uses (55, 56, 63, 79, 83, 88, 92, 95, 96, 97)	Recreation and tourism; commercial fishing; industrial development; energy development	Probably nominal net effect; negative only if regulations force plants to locate out- side the coastal zone altogether	Slightly positive, given more costly design re- quirements; negative if plants must go outside the zone	Positive, given more investment in safety equipment; negative if plants must go outside the zone or if profit- ability is severely reduced	Minimize adverse ef- fects of heavy indus- trial development on recreation potential; preserve fishing opportunities
Prohibit mining in fragile, valuable or highly scenic natural environments (41)	Mining; recreation and tourism	Negative	Nominal	Negative	Protect areas for public use; higher cost and less availability of mineral resources
Allow mining elsewhere in the coast only if there is no long-term adverse effects on coastal resources (41)	Mining	Slightly negative	Nominal	Positive -- investment in buffers and site restoration	Higher cost of mineral resources
Protect mineral reserves from urban encroach- ment (42)	Mining; housing and urban development	Positive	Negative	Positive	Lower cost of mineral resources

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/ Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Maintain prime agriculture through stabilization of urban/rural boundaries, zoning, easements, public acquisition, limitations or subdivision (30, 32, 35, 36, 37, 60)	Agriculture; housing and urban development	Slightly negative in that agriculture may be less labor intensive than urban uses	Negative	Positive re: agricultural productivity	More plentiful food resources at stable prices
Revise tax laws and provide other incentives for agricultural preservation (31)	Agriculture	Nominal	Nominal	Positive	More plentiful food resources at stable prices
Designate use of remaining agricultural parcels within highly developed areas (33)	Agriculture; housing and urban development	Depends on use designated - probably positive	Depends on use designated - probably positive	Depends on use designated - probably positive	Highest and best use of site
Restrict conversion of productive timberlands (38)	Forestry; housing and urban development	Depends on labor intensity of alternate use	Negative	Positive re: timber productivity	Greater availability and lower cost of wood products
Protect scenic qualities of timberland (38)	Recreation and tourism; forestry	Nominal	Nominal	Slightly negative due to higher operating costs for lumber industry	Preserve opportunities for hiking, trails, etc.; slightly higher costs for wood products
Protect water quality from adverse effects of logging (38)	Forestry; recreation and tourism	Nominal	Nominal	Slightly negative - higher operating costs	Higher cost of wood products
Modify taxation to encourage sustained timber yield (39)	Forestry	Nominal	Nominal	Positive	Lower cost of wood products

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/ Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Allow for conversion of non-prime agricul- ture and forest sites where continued use is infeasible or to promote conservation of more productive sites (34)	Agriculture; forestry; housing and urban development	Positive	Positive	Positive	More efficient use of land resources
Upgrade commercial fishing facilities (5)	Commercial fishing	Positive	Slightly positive	Positive	More plentiful fish supplies at lower costs
Maintain healthy populations of marine organisms (3)	Commercial fishing	Positive	Nominal	Positive	More plentiful fish supplies at lower costs
Upgrade marine, estuary, and wetland environments (2)	Recreation and tourism; commercial fishing	Slightly positive	Nominal	Slightly positive	Increased opportunities for sport fishing and commercial fishing
Regulate diking, fill- ing and dredging in other coastal waters (16, 17, 18)	Recreation and tourism, commercial fishing	Nominal	Slightly negative	Nominal	Preservation of natural environment
Study and implement methods of beach sand replenishment (19, 20)	Recreation and tourism	Slightly positive	Nominal	Positive	Preservation of beaches for recreation use and protection of man- made facilities
Limit substantial al- terations of the shore for recreation pur- poses (135)	Recreation and tourism	Nominal net effect	Slightly negative	Slightly negative	Preserve amenities in their natural state

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

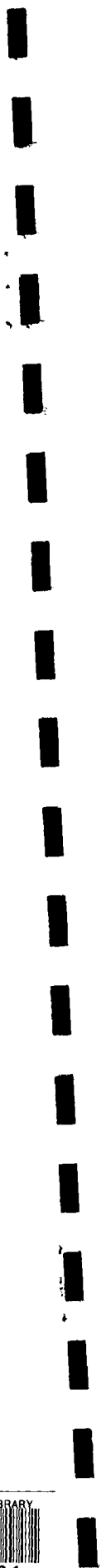
Primary Coastal Plan Policies	Primary Affected Sections of the Economy	Potential Economic Effects			Benefits/Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Restrict thermal dis- charges and other forms of water pollu- tion (7, 9, 10, 11, 12)	Commercial and indus- trial development; energy development, recreation and tourism	Nominal	Nominal	Increased investment in pollution controls; reduced profitability. More productive marine industries	Higher prices for manu- factured goods; protected marine resources
Give commercial rec- reation uses priority over other private development (133, 134)	Recreation and tourism; housing and urban development	Positive or negative, depending on whether other potential uses would be more labor intensive	Positive or negative, depending on whether other potential uses would entail larger construction outlay than recreation	Positive or negative, depending on whether other potential uses are more profitable	Preserve public access to recreational ameni- ties of the coast
Protect the visual quality of natural, historic, or open areas, and the coastal view- shed (44, 45, 46, 47, 48, 49, 50)	Recreation and tourism	Nominal	Slightly positive	Increased investment in site design, plan- ning, and main- tenance; development may be less profitable	Protect tourist enjoy- ment of visual resources
Encourage lower cost tourist facilities over exclusively expensive facilities (125)	Recreation and tourism	Positive, but not to the same extent as more luxurious de- velopment	Positive, but not to the same extent as more luxurious de- velopment	Positive, but not as profitable as more luxurious development. Tax and other incen- tives a positive induc- ement.	Maintenance of access to coastal resources for citizens of all income groups
Evaluate public recrea- tion potential and future demand before per- mitting other uses of oceanfront land (132)	Recreation and tourism; housing and urban development	Positive or negative, depending on whether other potential uses would be more labor intensive	Positive or negative, depending on whether other potential uses would entail larger construction outlay than recreation	Positive or negative, depending on whether other potential uses are more profitable	Preserve public access to recreational ameni- ties of the coast

EXHIBIT 3

POTENTIAL ECONOMIC DEVELOPMENT EFFECTS
OF SELECTED COASTAL PLAN POLICY ACTIONS
(continued)

Primary Coastal Plan Policies	Primary Affected Sectors of the Economy	Potential Economic Effects			Benefits/ Costs to the Consumer
		Employment (non-construction)	Construction Activity	Other Business Investment/Profitability	
Provide a variety of recreation opportunities near metropolitan areas (137)	Recreation; housing and urban development	Positive	Positive	Positive	Minimize travel dis- tance to recreation; lessen congestion of coastal facilities
Require new residen- tial development to provide on-site recreation (141)	Housing and urban development; recreation	Nominal	Positive	Increases investment; may reduce profitability	May increase housing costs borne by the ultimate consumer; greater amenity benefits; less crowding of public facilities
Establish and manage coastal reserves; acquire land where appropriate (150)	Recreation and tourism; housing and urban development	Slightly positive - increased public sector employment	Slightly negative	Slightly negative to negative, depending on extent of compensation	Maintain recreational resources
Foster recreational boating; improve access to marinas (146, 147, 148)	Recreation and tourism	Slightly positive	Positive	Positive (investment in boats, equipment, etc.)	Satisfy public demand for boating

Source: Real Estate Research Corporation



NOAA COASTAL SERVICES CENTER LIBRARY

3 6668 00000 1521